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Conference Abstract

Beaty Biodiversity Museum Collection and Observation Databases: Towards a single search interface

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Abstract

The Beaty Biodiversity Museum (BBM), at the University of British Columbia, houses over two million biological research specimens, with nearly 40% of the specimen records digitized into databases, unlocking a wealth of information for research and teaching (Table 1). However, these collection databases were neither available nor unified for users. Even museum and collections staff could not digitally access each other's collections. With a total of 6 collections (in different colors in Fig. 1) in 13 separate databases in differing stages of development, across several varying interfaces and systems, our goal was to unify the collection databases through the development of a single search interface (Fig. 1).

Table 1.

Current Searchable Record Count per Database

Databases	Records
Vascular	181,735
Algae	75,259

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Databases	Records
Fungi	32,822
Bryophytes	215,967
Lichen	56,689
Avian	22,117
Herpetology	1,895
Mammal	20,314
Entomology	68,959
Fish	34,815
Dry Marine Invertebrate	7,064
Wet Marine Invertebrate	3,052
Fossil	5,515

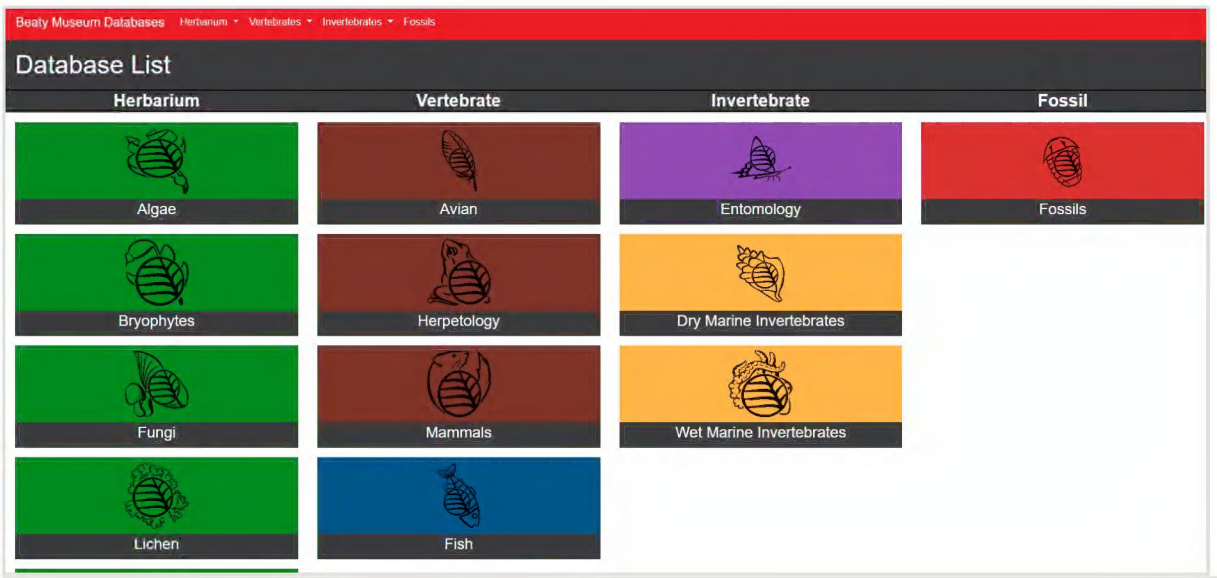

Figure 1.

Home page of the interface where one can navigate to any of the searchable collections. (Still in beta, Stable URL is not available yet but it is currently here: https://herbweb.botany.ubc.ca/testSite/).

This was a large collections project with multiple stages of development. Integration of the data was made possible through the efforts of multiple groups to standardize the fields of each database so they conformed to the Darwin Core standard (Group 2009). This mapping of fields allows each of the databases to be displayed and shared in a consistent format. It also simplified the integration of data for popular data aggregators (Canadensys, VertNet, FishNet2, Consortium of Pacific Northwest Herbaria, Electronic Atlas of the Plants of British Columbia, and Global Biodiversity Information Facility). When this first step was achieved, many features such as standarized georeferencing, simplified reporting and unified search interfaces could be implemented to aid all users, e.g., curators, museum staff, researchers, and the public. Through this new interface, it is possible to browse the near entirety of every digitized record within the museum with an in-house solution provided by the Beaty Biodiversity Museum.

Keywords

Beaty Biodiversity Museum, University of British Columbia, Darwin Core, unified search interface, collection research, databases, record search

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References

- Group DCT (2009) Darwin Core (Kampmeier G, review manager). Biodiversity Information Standards (TDWG). Release date: 2009-10-09. URL: http://www.tdwg.org/standards/450